OIPE

RAW SEQUENCE LISTING   DATE: 09/29/2003
PATENT APPLICATION: **US/10/663,401**   TIME: 14:36:33

Input Set : **N:\Crf3\RULE60\10663401.raw.txt**
Output Set: **N:\CRF4\09292003\J663401.raw**

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 1 <110> APPLICANT: CHEN, Hong
 2 <120> TITLE OF INVENTION: HUMAN GLUCOSE-6-PHOSPHATASE MOLECULES AND USES THEREOF
 3 <130> FILE REFERENCE: 10147-33U1
 4 <140> CURRENT APPLICATION NUMBER: US/10/663,401
 5 <141> CURRENT FILING DATE: 2003-09-16
 7 <150> PRIOR APPLICATION NUMBER: US/09/874,132
 8 <151> PRIOR FILING DATE: 2001-06-04
 9 <150> PRIOR APPLICATION NUMBER: US 09/586,511
10 <151> PRIOR FILING DATE: 2000-06-02
11 <160> NUMBER OF SEQ ID NOS: 27
12 <170> SOFTWARE: PatentIn Ver. 2.1
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 1138
16 <212> TYPE: DNA
17 <213> ORGANISM: Homo sapiens
18 <400> SEQUENCE: 1
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20      tccttcacag gaatggagtg ctcataattc agcatttgca gaaggactac cgagcttact 120
21      acacttttct aaattttatg tccaatgttg gagaccccag gaatatcttt ttcatttatt 180
22      ttccactttg ttttcaattt aatcagacag ttggaaccaa gatgatatgg gtagcagtca 240
23      ttggggattg gttaaatctt atatttaaat ggatattatt tggtcatcga ccttactggt 300
24      gggtccaaga aactcagatt tacccaaatc actcaagtcc atgccttgaa cagttcccta 360
25      ctacatgtga aacaggtcca ggaagtccat ctggccatgc aatgggcgca tcctgtgtct 420
26      ggtatgtcat ggtaaccgct gccctgagcc acactgtctg tgggatggat aagttctcta 480
27      tcactctgca cagactgacc tggtcatttc tttggagtgt tttttggttg attcaaatca 540
28      gtgtctgcat ctccagagta ttcatagcaa cacattttcc tcatcaagtt attcttggag 600
29      taattggtgg catgctggtg gcagaggcct ttgaacacac tccaggcatc caaacggcca 660
30      gtctgggcac atacctgaag accaacctct ttctcttcct gtttgcagtt ggcttttacc 720
31      tgcttcttag ggtgctcaac attgacctgc tgtggtccgt gcccatagcc aaaaagtggt 780
32      gtgctaaccc cgactggatc cacattgaca ccacgccttt tgctggactc gtgagaaacc 840
33      ttggggtcct ctttggcttg ggctttgcaa tcaactcaga gatgttcctc ctgagctgcc 900
34      gagggggaaa taactacaca ctgagcttcc ggttgctctg tgccttgacc tcattgacaa 960
35      tactgcagct ctaccatttc ctccagatcc cgactcacga agagcattta ttttatgtgc 1020
36      tgtcttttg taaaagtgca tccattcccc taactgtggt tgctttcatt ccctactctg 1080
37      ttcatatgtt aatgaaacaa agcggaaaga agagtcagta gaaaaaaaa aaaaaaa     1138
39 <210> SEQ ID NO: 2
40 <211> LENGTH: 1065
41 <212> TYPE: DNA
42 <213> ORGANISM: Homo sapiens
43 <400> SEQUENCE: 2
44      atggatttcc ttcacaggaa tggagtgctc ataattcagc atttgcagaa ggactaccga  60
45      gcttactaca cttttctaaa ttttatgtcc aatgttggag accccaggaa tatctttttc 120
46      atttattttc cactttgttt tcaatttaat cagacagttg gaaccaagat gatatgggta 180
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47      gcagtcattg gggattggtt aaatcttata tttaaatgga tattatttgg tcatcgacct 240
48      tactggtggg tccaagaaac tcagatttac ccaaatcact caagtccatg ccttgaacag 300
49      ttccctacta catgtgaaac aggtccagga agtccatctg gccatgcaat gggcgcatcc 360
50      tgtgtctggt atgtcatggt aaccgctgcc ctgagccaca ctgtctgtgg gatggataag 420
51      ttctctatca ctctgcacag actgacctgg tcatttcttt ggagtgtttt ttggttgatt 480
52      caaatcagtg tctgcatctc cagagtattc atagcaacac attttcctca tcaagttatt 540
53      cttggagtaa ttggtggcat gctggtggca gaggcctttg aacacactcc aggcatccaa 600
54      acggccagtc tgggcacata cctgaagacc aacctctttc tcttcctgtt tgcagttggc 660
55      ttttacctgc ttcttagggt gctcaacatt gacctgctgt ggtccgtgcc catagccaaa 720
56      aagtggtgtg ctaaccccga ctggatccac attgacacca cgccttttgc tggactcgtg 780
57      agaaaccttg gggtcctctt tggcttgggc tttgcaatca actcagagat gttcctcctg 840
58      agctgccgag ggggaaataa ctacacactg agcttccggt tgctctgtgc cttgacctca 900
59      ttgacaatac tgcagctcta ccatttcctc cagatcccga ctcacgaaga gcatttattt 960
60      tatgtgctgt cttttttgtaa aagtgcatcc attcccctaa ctgtggttgc tttcattccc 1020
61      tactctgttc atatgttaat gaaacaaagc ggaaagaaga gtcag 1065
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63 <210> SEQ ID NO: 3
64 <211> LENGTH: 355
65 <212> TYPE: PRT
66 <213> ORGANISM: Homo sapiens
67 <400> SEQUENCE: 3
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69      1               5                   10                  15
70      Lys Asp Tyr Arg Ala Tyr Tyr Thr Phe Leu Asn Phe Met Ser Asn Val
71                  20                  25                  30
72      Gly Asp Pro Arg Asn Ile Phe Phe Ile Tyr Phe Pro Leu Cys Phe Gln
73                  35                  40                  45
74      Phe Asn Gln Thr Val Gly Thr Lys Met Ile Trp Val Ala Val Ile Gly
75          50                  55                  60
76      Asp Trp Leu Asn Leu Ile Phe Lys Trp Ile Leu Phe Gly His Arg Pro
77      65                  70                  75                  80
78      Tyr Trp Trp Val Gln Glu Thr Gln Ile Tyr Pro Asn His Ser Ser Pro
79                      85                  90                  95
80      Cys Leu Glu Gln Phe Pro Thr Thr Cys Glu Thr Gly Pro Gly Ser Pro
81                  100                 105                 110
82      Ser Gly His Ala Met Gly Ala Ser Cys Val Trp Tyr Val Met Val Thr
83                  115                 120                 125
84      Ala Ala Leu Ser His Thr Val Cys Gly Met Asp Lys Phe Ser Ile Thr
85          130                 135                 140
86      Leu His Arg Leu Thr Trp Ser Phe Leu Trp Ser Val Phe Trp Leu Ile
87      145                 150                 155                 160
88      Gln Ile Ser Val Cys Ile Ser Arg Val Phe Ile Ala Thr His Phe Pro
89                      165                 170                 175
90      His Gln Val Ile Leu Gly Val Ile Gly Gly Met Leu Val Ala Glu Ala
91                  180                 185                 190
92      Phe Glu His Thr Pro Gly Ile Gln Thr Ala Ser Leu Gly Thr Tyr Leu
93                  195                 200                 205
94      Lys Thr Asn Leu Phe Leu Phe Leu Phe Ala Val Gly Phe Tyr Leu Leu
95          210                 215                 220
96      Leu Arg Val Leu Asn Ile Asp Leu Leu Trp Ser Val Pro Ile Ala Lys
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Input Set : N:\Crf3\RULE60\10663401.raw.txt
Output Set: N:\CRF4\09292003\J663401.raw

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97      225                   230                 235                   240
98      Lys Trp Cys Ala Asn Pro Asp Trp Ile His Ile Asp Thr Thr Pro Phe
99                          245                 250                   255
100     Ala Gly Leu Val Arg Asn Leu Gly Val Leu Phe Gly Leu Gly Phe Ala
101                     260                 265                   270
102     Ile Asn Ser Glu Met Phe Leu Leu Ser Cys Arg Gly Gly Asn Asn Tyr
103                 275                 280                 285
104     Thr Leu Ser Phe Arg Leu Leu Cys Ala Leu Thr Ser Leu Thr Ile Leu
105             290                 295                 300
106     Gln Leu Tyr His Phe Leu Gln Ile Pro Thr His Glu Glu His Leu Phe
107     305                 310                 315                   320
108     Tyr Val Leu Ser Phe Cys Lys Ser Ala Ser Ile Pro Leu Thr Val Val
109                 325                 330                 335
110     Ala Phe Ile Pro Tyr Ser Val His Met Leu Met Lys Gln Ser Gly Lys
111                 340                 345                 350
112     Lys Ser Gln
113             355
115 <210> SEQ ID NO: 4
116 <211> LENGTH: 355
117 <212> TYPE: PRT
118 <213> ORGANISM: Mus musculus
119 <400> SEQUENCE: 4
120     Met Asp Phe Leu His Arg Ser Gly Val Leu Ile Ile His His Leu Gln
121      1               5                   10                  15
122     Glu Asp Tyr Arg Thr Tyr Tyr Gly Phe Leu Asn Phe Met Ser Asn Val
123                 20                  25                  30
124     Gly Asp Pro Arg Asn Ile Phe Ser Ile Tyr Phe Pro Leu Trp Phe Gln
125             35                  40                  45
126     Leu Asn Gln Asn Val Gly Thr Lys Met Ile Trp Val Ala Val Ile Gly
127         50                  55                  60
128     Asp Trp Phe Asn Leu Ile Phe Lys Trp Ile Leu Phe Gly His Arg Pro
129     65                  70                  75                  80
130     Tyr Trp Trp Ile Gln Glu Thr Glu Ile Tyr Pro Asn His Ser Ser Pro
131                 85                  90                  95
132     Cys Leu Glu Gln Phe Pro Thr Thr Cys Glu Thr Gly Pro Gly Ser Pro
133                 100                 105                 110
134     Ser Gly His Ala Met Gly Ser Ser Cys Val Trp Tyr Val Met Val Thr
135             115                 120                 125
136     Ala Ala Leu Ser Tyr Thr Ile Ser Arg Met Glu Glu Ser Ser Val Thr
137         130                 135                 140
138     Leu His Arg Leu Thr Trp Ser Phe Leu Trp Ser Val Phe Trp Leu Ile
139     145                 150                 155                 160
140     Gln Ile Ser Val Cys Ile Ser Arg Val Phe Ile Ala Thr His Phe Pro
141                 165                 170                 175
142     His Gln Val Ile Leu Gly Val Ile Gly Gly Met Leu Val Ala Glu Ala
143                 180                 185                 190
144     Phe Glu His Thr Pro Gly Val His Met Ala Ser Leu Ser Val Tyr Leu
145             195                 200                 205
146     Lys Thr Asn Val Phe Leu Phe Leu Phe Ala Leu Gly Phe Tyr Leu Leu
```

```
147          210                 215                 220
148     Leu Arg Leu Phe Gly Ile Asp Leu Leu Trp Ser Val Pro Ile Ala Lys
149     225             230             235                 240
150     Lys Trp Cys Ala Asn Pro Asp Trp Ile His Ile Asp Ser Thr Pro Phe
151                 245             250                 255
152     Ala Gly Leu Val Arg Asn Leu Gly Val Leu Phe Gly Leu Gly Phe Ala
153             260             265             270
154     Ile Asn Ser Glu Met Phe Leu Arg Ser Cys Gln Gly Glu Asn Gly Thr
155         275             280             285
156     Lys Pro Ser Phe Arg Leu Leu Cys Ala Leu Thr Ser Leu Thr Thr Met
157         290             295             300
158     Gln Leu Tyr Arg Phe Ile Lys Ile Pro Thr His Ala Glu Pro Leu Phe
159     305             310             315             320
160     Tyr Leu Leu Ser Phe Cys Lys Ser Ala Ser Ile Pro Leu Met Val Val
161             325             330             335
162     Ala Leu Ile Pro Tyr Cys Val His Met Leu Met Arg Pro Gly Asp Lys
163             340             345             350
164     Lys Thr Lys
165         355
167 <210> SEQ ID NO: 5
168 <211> LENGTH:
169 <212> TYPE:
170 <213> ORGANISM:
171 <400> SEQUENCE: 5
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175 <211> LENGTH:
176 <212> TYPE:
177 <213> ORGANISM:
178 <400> SEQUENCE: 6
W--> 179     000
181 <210> SEQ ID NO: 7
182 <211> LENGTH:
183 <212> TYPE:
184 <213> ORGANISM:
185 <400> SEQUENCE: 7
W--> 186     000
188 <210> SEQ ID NO: 8
189 <211> LENGTH:
190 <212> TYPE:
191 <213> ORGANISM:
192 <400> SEQUENCE: 8
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195 <210> SEQ ID NO: 9
196 <211> LENGTH:
197 <212> TYPE:
198 <213> ORGANISM:
199 <400> SEQUENCE: 9
W--> 200     000
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            RAW SEQUENCE LISTING              DATE: 09/29/2003
            PATENT APPLICATION:  US/10/663,401      TIME: 14:36:33

            Input Set : N:\Crf3\RULE60\10663401.raw.txt
            Output Set: N:\CRF4\09292003\J663401.raw

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       203 <211> LENGTH:
       204 <212> TYPE:
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       206 <400> SEQUENCE: 10
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       209 <210> SEQ ID NO: 11
       210 <211> LENGTH:
       211 <212> TYPE:
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       213 <400> SEQUENCE: 11
W--> 214         000
       216 <210> SEQ ID NO: 12
       217 <211> LENGTH:
       218 <212> TYPE:
       219 <213> ORGANISM:
       220 <400> SEQUENCE: 12
W--> 221         000
       223 <210> SEQ ID NO: 13
       224 <211> LENGTH:
       225 <212> TYPE:
       226 <213> ORGANISM:
       227 <400> SEQUENCE: 13
W--> 228         000
       230 <210> SEQ ID NO: 14
       231 <211> LENGTH:
       232 <212> TYPE:
       233 <213> ORGANISM:
       234 <400> SEQUENCE: 14
W--> 235         000
       237 <210> SEQ ID NO: 15
       238 <211> LENGTH:
       239 <212> TYPE:
       240 <213> ORGANISM:
       241 <400> SEQUENCE: 15
W--> 242         000
       244 <210> SEQ ID NO: 16
       245 <211> LENGTH:
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       248 <400> SEQUENCE: 16
W--> 249         000
       251 <210> SEQ ID NO: 17
       252 <211> LENGTH:
       253 <212> TYPE:
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W--> 256         000
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 09/29/2003
PATENT APPLICATION: **US/10/663,401**   TIME: 14:36:34

Input Set : **N:\Crf3\RULE60\10663401.raw.txt**
Output Set: **N:\CRF4\09292003\J663401.raw**

<u>Invalid Line Length:</u>
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 2

VERIFICATION SUMMARY   DATE: 09/29/2003
PATENT APPLICATION: **US/10/663,401**   TIME: 14:36:34

Input Set : **N:\Crf3\RULE60\10663401.raw.txt**
Output Set: **N:\CRF4\09292003\J663401.raw**

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L:172 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (5)  SEQUENCE:
L:179 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (6)  SEQUENCE:
L:186 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (7)  SEQUENCE:
L:193 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (8)  SEQUENCE:
L:200 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (9)  SEQUENCE:
L:207 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (10) SEQUENCE:
L:214 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (11) SEQUENCE:
L:221 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (12) SEQUENCE:
L:228 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (13) SEQUENCE:
L:235 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (14) SEQUENCE:
L:242 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (15) SEQUENCE:
L:249 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (16) SEQUENCE:
L:256 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (17) SEQUENCE:
L:263 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (18) SEQUENCE:
L:270 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (19) SEQUENCE:
L:277 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (20) SEQUENCE:
L:284 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (21) SEQUENCE:
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